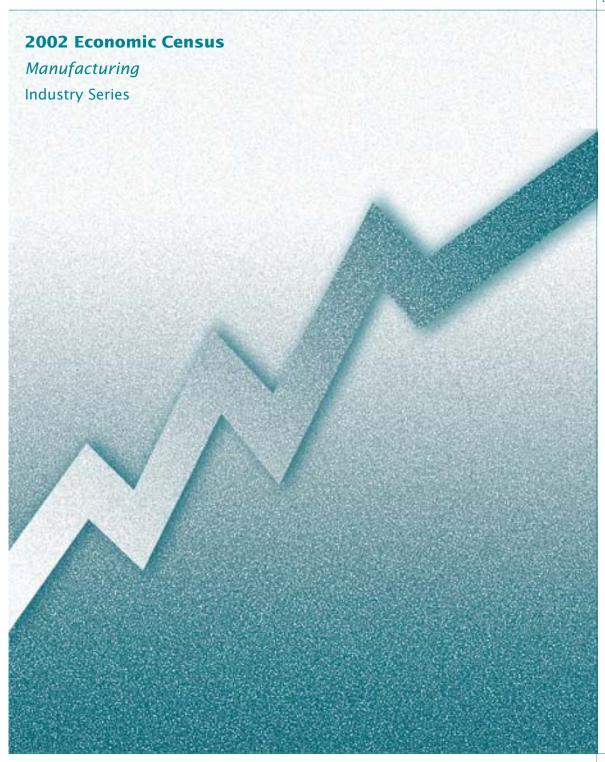
# Special Die and Tool, Die Set, Jig, and Fixture Manufacturing: 2002

Issued January 2005

EC02-311-333514 (RV)





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U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU



#### **CONTENTS**

	duction to the Economic Census	v ix
Table	es	
1. 2. 3. 4. 5. 6a. 6b. 7.	Historical Statistics for the Industry: 2002 and Earlier Years Industry Statistics for Selected States: 2002 Detailed Statistics by Industry: 2002 Industry Statistics by Employment Size: 2002 Industry Statistics by Primary Product Class Specialization: 2002 Products Statistics: 2002 and 1997 Product Class Shipments for Selected States: 2002 and 1997 Materials Consumed by Kind: 2002 and 1997	1 2 3 4 5 6  9
Appe	endixes	
A. B. C. D. E. F.	Explanation of Terms	A-1 B-1 C-1   F-1

#### Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

		All	All employees		Production workers				Total	Total	Total capital
Industry and year <sup>1</sup>	Com- panies <sup>2</sup>		Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	shipments	expendi- tures (\$1,000)
333514, Special die and tool, die set, jig,											
and fixture manufacturing2002	3 660	3 729	60 840	2 666 509	44 642	88 977	1 774 813	4 846 021	2 198 427	7 043 213	r270 315
2001	N	N	71 838	2 854 081	54 319	111 701	1 966 394	5 026 944	2 165 163	7 271 736	350 962
2000	N	N	77 987	3 234 362	59 970	121 590	2 255 752	5 933 600	2 611 579	8 565 823	553 968
1999	N	N	80 159	3 227 356	61 050	128 635	2 255 323	5 813 268	2 415 382	8 225 289	543 449
1998	N	N	82 269	3 274 181	63 722	135 185	2 277 350	5 952 449	2 388 790	8 366 502	500 909
1997	4 667	4 744	79 994	3 226 074	62 075	128 703	2 259 920	5 938 346	2 381 528	8 237 755	500 675

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

		All establi	shments <sup>2</sup>	All em	ployees	Pro	oduction work	kers		-		
Industry and geographic area	E¹	Total	With 20 em- ploy- ees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
333514, Special die and tool, die set, jig, and fixture manufacturing												
United States.  Alabama Arizona Arkansas California Colorado Connecticut Florida Georgia Illinois Indiana	2 2 2 4 1 2 5 2 1 2 2	3 729 30 29 29 266 25 108 71 44 288 207	800 8 3 5 31 2 10 8 7 58 51	60 840 871 270 304 2 942 210 1 147 651 462 4 217 3 203	2 666 509 26 054 9 542 10 647 113 685 9 263 51 870 25 376 21 528 191 191 129 272	44 642 698 188 229 2 028 144 826 429 334 3 060 2 356	88 977 1 250 286 419 3 863 264 1 610 842 630 6 233 4 599	1 774 813 17 115 6 074 7 413 66 907 5 620 32 910 13 187 12 453 121 922 87 413	4 846 021 46 056 16 752 16 930 213 248 83 346 51 224 43 621 345 839 220 448	2 198 427 17 643 6 257 7 489 118 813 5 594 32 631 18 292 15 091 155 707 92 572	7 043 213 63 613 23 038 24 371 331 161 19 714 115 128 69 443 55 124 502 319 312 411	r270 315 r4 633 r933 r520 r15 174 r534 r3 798 r1 364 r1 020 r17 814 r12 524
lowa Kentucky Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Jersey	2 4 4 3 1 1 2 1 2 3	38 53 15 75 748 81 23 64 12 92	10 8 2 6 249 20 5 12 3 7	518 581 174 544 18 413 1 994 281 1 037 419 565	21 118 23 088 7 743 23 719 903 207 98 836 9 897 43 097 8 996 24 298	410 421 126 384 13 708 1 342 195 772 246 437	804 873 269 727 27 717 2 685 413 1 836 411 868	15 871 15 476 4 760 15 535 619 187 57 028 6 259 28 155 5 600 17 160	34 119 36 403 13 004 39 052 1 670 736 170 235 14 397 86 544 18 842 46 078	14 577 12 218 5 214 13 059 786 211 56 599 7 999 37 929 10 156 15 539	49 240 48 139 18 193 52 401 2 466 172 224 281 22 519 125 037 28 210 62 067	r2 866 r3 322 r580 r1 361 r96 264 r4 133 r1 025 r4 317 r817 r2 913
New York North Carolina Ohio Pennsylvania Rhode Island South Carolina Tennessee Texas Vermont Virginia Wisconsin	3 1 2 1 1 1 3 2 3 2 3	138 59 380 234 30 107 90 11 22 180	22 95 58 4 3 20 8 8 4 47	1 763 632 6 828 3 836 286 362 1 330 882 1 169 363 3 264	68 443 21 407 291 654 156 656 11 491 14 585 53 538 33 483 60 766 14 075 140 287	1 334 467 5 010 2 936 188 233 984 660 862 197 2 484	2 518 866 10 209 5 819 356 415 1 779 1 139 2 115 379 4 934	47 092 14 130 195 210 111 382 6 322 8 332 36 288 22 182 41 795 5 850 98 209	118 653 48 952 562 695 269 771 22 734 26 113 90 347 60 873 67 455 36 835 272 262	49 013 12 325 270 621 96 192 7 483 10 258 35 963 19 609 121 859 9 562 94 383	166 700 61 425 823 334 369 282 30 933 36 634 125 000 80 944 189 547 46 210 366 662	"6 571 "1 693 "33 187 "11 158 "1 519 "845 "5 047 "6 360 "7 037 "524 "14 903

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

#### Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
333514, Special die and tool, die set, jig, and fixture manufacturing	
Companies <sup>1</sup> number	3 660
All establishments <sup>2</sup>	3 729 2 929 712 88
All employees3         number           Total compensation         \$1,000           Annual payroll         \$1,000           Total fringe benefits         \$1,000	60 840 3 150 952 2 666 509 484 443
Production workers, average for year	44 642 44 596 44 812 44 402 44 600
Production worker hours	88 977 1 774 813
Total cost of materials         \$1,000.           Materials, parts, containers, packaging, etc., used         \$1,000.           Resales         \$1,000.           Purchased fuels         \$1,000.           Purchased electricity         \$1,000.           Contract work         \$1,000.	2 198 427 1 665 012 132 960 14 519 69 723 316 213
Quantity of electricity purchased for heat and power	1 063 283 311 395
Total value of shipments         \$1,000           Primary products value of shipments         \$1,000           Secondary products value of shipments         \$1,000           Total miscellaneous receipts         \$1,000           Value of resales         \$1,000           Contract receipts         \$1,000           Other miscellaneous receipts         \$1,000	7 043 213 6 239 943 377 966 425 304 180 117 156 756 88 431
Primary products specialization ratio percent Value of primary products shipments made in all industries \$1,000. Value of primary products shipments made in this industry \$1,000. Value of primary products shipments made in other industries \$1,000.	94 7 580 485 6 239 943 1 340 542
Coverage ratiopercent .	82
Value added\$1,000	4 846 021
Total inventories, beginning of year       \$1,000         Finished goods inventories       \$1,000         Work-in-process inventories       \$1,000         Materials and supplies inventories       \$1,000	1 039 456 251 244 612 740 175 472
Total inventories, end of year         \$1,000           Finished goods inventories         \$1,000           Work-in-process inventories         \$1,000           Materials and supplies inventories         \$1,000	1 046 078 275 735 589 484 180 859
Gross value of depreciable assets (acquisition costs) at beginning of year         \$1,000           Total capital expenditures (new and used)         \$1,000           Buildings and other structures (new and used)         \$1,000           Machinery and equipment (new and used)         \$1,000           Automobiles, trucks, etc., for highway use         \$1,000           Computers and peripheral data processing equipment         \$1,000           All other expenditures for machinery and equipment         \$1,000           Total retirements         \$1,000           Gross value of depreciable assets at end of year         \$1,000	'4 098 854 '270 315 '34 642 '235 673 '22 859 '32 452 '180 362 '246 008 '4 123 161
Depreciation charges during year\$1,000	<sup>1</sup> 276 165
Total rental payments \$1,000. Buildings and other structures \$1,000 Machinery and equipment \$1,000.	174 840 112 420 62 420
Total other expenses <sup>4</sup> \$1,000 Response coverage ratio <sup>5</sup> percent. Repair and maintenance services of buildings and/or machinery <sup>4</sup> \$1,000 Communications services <sup>4</sup> \$1,000 Legal services <sup>4</sup> \$1,000 Accounting, auditing, and bookkeeping services <sup>4</sup> \$1,000 Advertising and promotional services <sup>4</sup> \$1,000 Expensed computer hardware and supplies and purchased computer services <sup>4</sup> \$1,000 Refuse removal (including hazardous waste) services <sup>4</sup> \$1,000 Management consulting and administrative services <sup>4</sup> \$1,000 Taxes and license fees <sup>4</sup> \$1,000 All other expenses <sup>4</sup> \$1,000	553 379 79 63 054 21 490 10 128 16 550 18 510 16 091 5 434 18 917 40 977 342 229

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.
2Includes establishments with payroll at any time during the year.
3Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.
4Based on 2002 Annual Survey of Manufactures (ASM) sample data.
5A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class			All emp	oloyees	Pr	oduction worke	rs		Total	Total	Total capital
		All estab- lish- ments <sup>2</sup>	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
333514, Special die and tool, die set, jig, and fixture manufacturing											
All establishments	2	3 729	60 840	2 666 509	44 642	88 977	1 774 813	4 846 021	2 198 427	7 043 213	'270 315
1 to 4 employees 5 to 9 employees	9	1 710 563	3 277 3 882	134 026 150 952	2 460 2 847	4 693 5 067	92 273 106 498	226 527 254 451	81 634 104 159	308 385 385 719	<sup>r</sup> 6 334 <sup>r</sup> 13 145
10 to 19 employees	1	656 535	9 045 16 016	364 383 708 011	6 693 11 919	12 254 24 279	249 768 480 858	629 903 1 287 667	243 935 493 883	901 994 1 774 933	r34 748 r78 438
50 to 99 employees	2	177 74	11 737 10 635	538 172 479 474	8 642 7 325	18 765 15 071	357 311 285 540	1 024 230 925 37 <u>3</u>	434 672 468 722	1 426 796 1 376 827	r55 707 r67 37 <u>2</u>
250 to 499 employees	1	12 1	h f	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	_	1 -	<u>g</u> _	– –	D	– –	– –	– 	- -	– –	– –
Administrative records <sup>4</sup>	9	1 583	3 077	126 574	2 335	4 469	87 334	211 723	75 859	287 526	′5 527

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All	All em	ployees	Pı	oduction work	ers		Total	Total	Total capital
		estab- lish- ments <sup>1</sup>	Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	cost of materials (\$1,000)	value of shipments (\$1,000)	expendi- tures (\$1,000)
333514	Special die and tool, die set, jig, and fixture manufacturing	3 729	60 840	2 666 509	44 642	88 977	1 774 813	4 846 021	2 198 427	7 043 213	<sup>r</sup> 270 315
3335140	Special dies, tools, jigs, and fixtures	3 729	60 840	2 666 509	44 642	88 977	1 774 813	4 846 021	2 198 427	7 043 213	<sup>r</sup> 270 315

<sup>&</sup>lt;sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

#### Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product		Number of companies with		Product s	shipments
code	Product	shipments of \$100,000 or more	Quantity of production for all purposes	Quantity	Value (\$1,000)
333514	Special die and tool, die set, jig, and fixture manufacturing	N N	X	X	7 580 485 8 777 134
33351401	Jigs and fixtures	N N	X X	X X	1 174 968 1 009 362
3335140101	Gauging and checking jigs and fixtures, less than 1,000 lb weight	230	X	X	476 382
3335140103	Gauging and checking jigs and fixtures, 1,000 lb weight or more	394 91	X X		331 822 224 317
3335140106	Other than work holding fixtures	92 52	X	X X X X X	130 525 99 424
3335140109	1997	139 129	X X X	X	98 454 190 254
3335140112	Other jigs and fixtures, 1,000 lb weight or more (holding, positioning, layout, assembly, etc.)	320 59	X		233 099 184 591
33351402	Standard catalog components and parts for jigs and fixtures, including drill bushings	93 N	X X	X X	215 462 125 224
3335140215	Standard catalog components and parts for jigs and fixtures, including drill bushings	N 31	X X	X X	116 877 125 224
33351403	Metalworking forming and drawing dies, all sizes	42 N	X X	X X X X X	116 877 737 967
3335140318	Press brake metalworking dies	N 32	X	X	781 105 71 993
3335140321	Metalworking forming and drawing dies, 500 lb weight or less	60 104	X X		85 278
3335140326	Metalworking forming and drawing dies 501 to 3 000 lb	216	X	X	119 083 173 825
3335140332	weight	98 220	X X	X	178 119 141 954
3335140332	Metalworking forming and drawing dies, more than 3,000 lb weight	96 145	X	X X	368 772 380 048
33351404	All other metalworking stamping-type dies, including lamination and blanking dies (punch, trim, notch, pierce, perforate, etc.)	N	X	X	953 338
3335140423	All other metalworking stamping-type dies, including lamination and blanking dies (punch, trim, notch, pierce, perforate, etc.)	N 217	x x	X	1 051 329 716 409
3335140429	Other metalworking stamping dies (including lamination and blanking), progressive-type	405 105	x x	x x	726 502 236 929
33351405	Metalworking stamping, forging, extrusion, and wiredrawing and straightening dies	254 N	X X	X X	324 827 1 019 962
3335140535	Metalworking stamping dies (including lamination and blanking), progressive-type, high-speed steel	N 319	x x	×	1 440 015 659 624
3335140538	Metalworking stamping dies (including lamination and blanking), progressive-type, carbide	598 77	X X	X X	898 217 168 763
3335140541	Metalworking open-type forging dies, including cold forging and heading	109 24	x x	x x	161 414 53 007
3335140543	Metalworking closed-type forging dies, including cold forging and heading	62 27	x x	x x	113 639 D
3335140546	Metalworking ceramic and ceramic composite extrusion and wiredrawing and straightening dies	85 4	x x	×	122 341 D
3335140549	Metalworking high-speed steel extrusion and wiredrawing	21	X	X	28 842 67 107
33351406	and straightening dies	63 N	X X X	X X X	115 562 517 375
3335140652	Other metalworking extrusion and wiredrawing and straightening dies	N 34	X X	x	607 171 156 488
3335140655	Metalworking carbide extrusion and wiredrawing and straightening dies	44 23	x x	×	126 228 38 016
3335140658	1997 All other high-speed steel metalworking dies	47 32	X	x x	53 700 87 123
3335140661	1997 All other carbide metalworking dies	115 19	X	X	115 892 31 496
3335140663	1997 All other metalworking dies	66 71	X X	X	75 028 114 122
3335140666	Standard and special metalworking die sets	92 28	X X	X	115 969 90 130
33351407	Punches for dies	70 N	X	X	120 354 167 933
3335140769	1997	N 43	X	X	418 775 125 268
3335140772	1997 Standard carbide punches for dies	110 24 39	X	X X X X X X X X X X X X X X X X X X X	187 984 24 744 29 545
3335140775	Other standard punches for dies	10 124	X	X	29 545 17 921 201 246
33351408	Industrial models and prototypes	N N N	,	į	465 847 642 805
3335140878	Industrial models and prototypes	284 415	X	X X	465 847 642 805
33351409	Other specially designed tooling	N N	X		780 873 1 046 786
3335140981	Other specially designed tooling	312 500	X	X X	780 873 1 046 786
3335140Y	Special dies, tools, jigs, and fixtures, nsk, total	N	l	l	1 636 998

See footnotes at end of table.

#### Table 6a. Products Statistics: 2002 and 1997—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

		Number of		Product shipments		
Product code	Product	companies with shipments of \$100,000 or more	Quantity of production for all purposes	Quantity	Value (\$1,000)	
333514 3335140Y	Special die and tool, die set, jig, and fixture manufacturing—Con. Special dies, tools, jigs, and fixtures, nsk, total—Con.					
	1997	N	X	X	1 662 909	
3335140YWW	Special dies, tools, jigs, and fixtures, nsk, for nonadministrative-record establishments					
		N	X	X	1 352 896	
	1997	N	X	X	1 372 658	
3335140YWY	Special dies, tools, jigs, and fixtures, nsk, for administrative-			,,	004 400	
	record establishments	l N	X	X	284 102	
	1997	N	Х	X	290 251	

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

## Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Not applicable for this report.]

### Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
333514	Special die and tool, die set, jig, and fixture manufacturing		
00900001	Total materials	X	1 665 012
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	1 679 008 78 710
33200095	Other fabricated metal products (excluding castings and forgings)	X X X	87 646 100 508 113 706
33210000	Forgings	×	4 168
33151001	lron and steel castings (rough and semifinished)	X X X	N 87 671
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X X X	96 376 18 440 30 869
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products)	X	348 601
33120016	Steel sheet and strip (including tinplate)	X	318 976 28 351
33120033	1997   All other steel shapes and forms (excluding castings, forgings, and fabricated metal products)	X	N 36 231
	1997	X	40 773
33131500	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	13 272 N
33100055	All other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	×	7 402
33100077	Other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal	â	5 932
33100077	products)	X	13 113 14 243
33149200	Tungsten carbide metal powders	X	24 429
331000AC	1997   All other metal powders	X X X X	28 988 2 495
32799903	1997   100   1997	X X X	2 572 7 243 8 892
001900B1	Electrical transmission, distribution, and control equipment	x	17 860
32791001	Grinding wheels and other abrasive products, excluding industrial diamonds	X X X	21 013 11 441
00190090	Fluid power products	X X X	18 993 25 830 46 859
33351503	Cutting tools for machine tools	x	28 629
00970099	All other materials and components, parts, containers, and supplies	X	N 442 338
00971000	Materials, ingredients, containers, and supplies, nsk	X X X	478 601 368 280 364 569

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.